APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,853	04/25/2002	Jacek Kowalski	P01,0401	1853

26574 7590 02/26/2007	EXAMINER
SCHIFF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473	ROBINSON, MYLES D

	ART UNIT	PAPER NUMBER
	2625	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
	10/019,853	KOWALSKI ET AL.
Office Action Summary	Examiner	Art Unit	
	Myles D. Robinson	2625	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 February 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>16 - 19 and 21 - 26</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>16 - 19 and 21 - 26</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 April 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date. _____ .

3)☐ Information Disclosure Statement(s) (PTO/SB/08)   5)☐ Notice of Informal Patent Application

    Paper No(s)/Mail Date _____ .   6)☐ Other: _____ .

DETAILED ACTION

Response to Amendment

1.   Applicant's amendment was received on 2/9/2007, and has been entered and

made of record. Currently, **claims 16 – 19 and 21 – 26** are pending.

2.   Applicant's request for reconsideration of the finality of the rejection of the last

Office action is persuasive and,.therefore, the finality of that action is withdrawn.

Response to Arguments

3.   Applicant's arguments with respect to the rejections of **claims 16, 21, 24 and 26**

under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the

rejection has been withdrawn. However, upon further consideration, a new ground(s) of

rejection is made in view of **Allen *et al.*** (U.S. Patent No. 6,099,225).

Regarding **claims 16, 21, 24 and 26**, the Applicant argues that **Rourke *et al.***

(U.S. Patent No. 5,398,289) in view of **Stahl GmbH "Folding Techniques"** and in view .

of **Yamada** (U.S. Patent No. 4,672,462) does not disclose, teach or suggest performing

position correction page by page within a signature based on the parameter (*see*

Remarks 2/9/2007 [page 7, lines 1 – 18]).

However, Allen does disclose performing position correction page by page within

a signature based on the parameter (*column 3, lines 8 – 9 wherein a fold line is created*

in the center of each sheet and column 4, lines 53 – 57 wherein the software adjusts the

location of printed images [i.e. page by page] on each sheet such that the position will

vary sheet-wise based upon the page number in the booklet and such position

correction is simulated via the software).

In response to applicant's argument that the examiner has combined an

excessive number of references, reliance on a large number of references in a rejection

does not, without more, weigh against the obviousness of the claimed invention. See *In*

re Gorman, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

Therefore, the Applicant's arguments regarding claims 16, 21, 24 and 26 are

considered not persuasive. Please cite rationale of the grounds of rejection below for

further explanation.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

5.   ***Claims 24 and 25*** are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

6.   Referring to **claim 24**, it is not distinctly clear whether the step of computationally

simulating folds is implemented by the "computer program product" (*claim 24, line 1*) or

whether ***a unique and different*** "computer program" (*claim 24, line 11*) other than the

"computer program product" assists with the implementing the step of computationally

simulating folds.

All claims dependent upon this claim suffer the same deficiencies and, therefore,

are rejected as well.

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   ***Claims 16 – 19 and 21 – 26*** are rejected under 35 U.S.C. 101 because the

claimed invention is directed to non-statutory subject matter. Claims 16, 21, 24 and 26

are drawn to functional descriptive material NEITHER claimed as residing on a

computer readable medium NOR defining a structural and functional interrelationship

between the computer program residing on a computer readable medium and a

computer or some other hardware component. See MPEP 2106.01 (Functional

Descriptive Material) which states:

> "Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer."

> "Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structures' functionality to be realized."

Claims 16, 21, 24 and 26, while defining a computer program, do not define

"computer-readable medium" and a "computer" or some other hardware component

executing such computer program and is thus non-statutory for that reason. A

computer program can range from paper on which the program is written, to a program

simply contemplated and memorized by a person. The examiner suggests amending

the claim to embody the program on "computer-readable medium" and to include a

"computer" or some other hardware component that executes the computer program

embodied on the "computer readable medium" in order to make the claim statutory.

> "In contrast, a claimed computer-readable medium encoded with the data structure defines structural
> and functional interrelationships between the data structure and the computer software and hardware
> components which permit the data structure's functionality to be realized, and is thus statutory." –·
> MPEP 2106.IV.B.1(a)

All claims dependent upon these claims suffer the same deficiencies and,

therefore, are rejected as well.

3.   ***Claim 25*** is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Claim 25 is drawn to non-functional descriptive

material. MPEP 2016.IV.B.1(a) (Nonfunctional Descriptive Material) states:

> "Descriptive material that cannot exhibit any functional interrelationship with the way in which
> ·computing processes are performed does not constitute a statutory process, machine, manufacture or
> composition of matter and should be rejected under 35 U.S.C. 101."

> "Where certain types of descriptive material, such as music, art, photographs and mere arrangements
> or compilations of facts or data, are merely stored so as to be read or outputted by a computer without
> creating any functional interrelationship, either as part of the stored data or as part of the computing
> process performed by the computer, then such descriptive material alone does not impart functionality
> either to the data as so structured, or to the computer."

> "For example, music is commonly sold to consumers in the form of a compact disc. In such cases, the
> know compact disc acts as nothing more than a carrier for nonfunctional descriptive material. The
> purely nonfunctional descriptive material cannot alone provide the practical application for the
> manufacture."

MPEP 2106.IV.B.1 (Nonstatutory Subject Matter) states:

> "When nonfunctional descriptive material is recorded on some computer-readable medium, it is not
> statutory since no requisite functionality is present to satisfy the practical application requirement."

Claim 25 currently recites a "data carrier," "datafile," "computer program module,"

"command sequence," and "signal sequence." There is no functional relationship

imparted by this data to a computing device. Therefore, the claim is drawn to non-

functional descriptive material which is non-statutory per se. The fact that the claim

recites a computer readable medium does not provide utility (i.e., practical application in the technological arts) required under 35 U.S.C. for the manufacture.

Furthermore, the Applicant regards the "data carrier," "command sequence," and "signal sequence" within claim 25 alternatively as a transient medium, or a signal (*see Specification [page 7, lines 1 – 6]*). Transient medium and signals, considered in the forms of electrical, optical, microwave, radio frequency, etc., are all categorized under non-statutory subject matter of natural phenomenon. Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are non-statutory natural phenomena. *O'Reilly v. Morse*, 56 U.S. (15How.) 62, 112-14 (1853).

Regarding claim 25, it is suggested that the Applicant consider amending "carrier medium" to read "tangible computer-readable carrier medium" in order to make the claim statutory.

Claim Rejections - 35 USC § 103

4.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5.   ***Claims 14 – 16 and 19 – 26*** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rourke** *et al.* (U.S. Patent No. 5,398,289) in view of **Stahl GmbH "Folding Techniques"** and in view of **Yamada** (U.S. Patent No. 4,672,462) and further in view of **Allen** *et al.* (U.S. Patent No. 6,099,225).

Referring to **claim 21**, Rourke discloses a printing system, comprising:

at least one computer (*see Figs. 2, 5A – 5C, controller 7 comprising system controller 54*); and

a printer device connected to said at least one computer (*see Fig. 2, printer section 8 connected to controller 7*) for implementing steps of:

editing the print data for printing on a recording medium a logical page sequence corresponding to at least one signature, said at least one signature forming a section of a printed product (*see Fig. 8A, signature 170 and Fig. 9, segment 174 and book 175*) and including a plurality of pages (*see Fig. 19 [column 6, line 52 – column 7, line 7]*),

defining at least one parameter of a recording medium on which the print data are printed and that is relevant for a position of a print image on the recording medium folded in signatures (*column 7, lines 8 – 28 wherein number of signatures SI is calculated from the number of pages in the set N, number of pages per signature P and the type and thickness of sheets*),

implementing a position correction (*see Fig. 19, shift increment x and extra shift increment x' [column 10, lines 13 – 55]*) of the respective print image on the pages before printing dependent on said at least one parameter (*column 7, lines 8 – 28 and column 10, lines 13 – 19 wherein the shift increment x is automatically based upon the previously calculated number SI*), and

computationally simulating folds of said recording medium needed for producing said at least one signature (*see Fig. 15 wherein print preview displaying signature fold line of print media [column 9, lines 6 – 8]*) with assistance of a computer program

(*column 5, lines 45 – 48, column 6, lines 33 – 44 and column 11, line 6 – column 12,*

line 2 wherein computer program implements signature jobs) so that the print images of

successive pages of the folded signature lie exactly registered above one another (*see*

Figs. 9 and 13 wherein pages with printed images are folded to lie one on top of the

other [column 6, line 52 – column 7, line 7, and column 8, lines 23 – 46]) but does not

explicitly disclose the system further wherein the folds ensue in two directions

perpendicular to one another, said position correction ensues in the two directions

perpendicular to one another, and said simulating folds being implemented page by

page.

Stahl GmbH discloses the system wherein the folds ensue in two directions

perpendicular to one another (*pages 32 – 48 wherein folds in two directions*

perpendicular to one another) but does not explicitly disclose the system further wherein

said position correction ensues in the two directions perpendicular to one another and

said simulating folds being implemented page by page.

Yamada discloses the system wherein said position correction ensues in the two

directions perpendicular to one another (*see Fig. 2 wherein margins and gutters b, c*

and d correct image position perpendicular to margin and gutter a [column 4, lines 12 –

15]) but does not explicitly disclose the system further wherein said simulating folds

being implemented page by page.

Allen discloses the system wherein said simulating folds being implemented

page by page (*column 3, lines 8 – 9 wherein a fold line is created in the center of each*

sheet and column 4, lines 53 – 57 wherein the software adjusts the location of printed

images [i.e. page by page] on each sheet such that the position will vary sheet-wise

based upon the page number in the booklet).

Rourke, Stahl GmbH, Yamada and Allen are combinable because they are both

from the same field of endeavor, being signature printing of plural images. At the time

of the invention, it would have been obvious to one of ordinary skill in the art to include

both folding a sheet of paper and correcting the position of image data in two directions

perpendicular to one another along with a method in editing and producing a signature

product. The suggestion/motivation for doing so would have been to increase efficiency

and to provide better results with proper folding techniques, as suggested by Stahl

GmbH (*page 22, lines 1 – 6*).

Furthermore, it would have been obvious to one of ordinary skill in the art at the

time of invention to include correcting the position of image data in two directions

perpendicular to one another along with a method in editing and producing a signature

product. The suggestion/motivation for doing so would have been to compensate the

difference in gutter width between pages which are to be inner pages and in which are

to be outer pages for the varying numbers of pages in binding magazines or catalogues,

as suggested by Yamada (*column 2, lines 5 – 23*).

Furthermore, it would have been obvious to one of ordinary skill in the art at the

time of invention to include simulating folds being implemented page by page. The

suggestion/motivation for doing so would have been to assemble a saddle-stitched

booklet wherein each sheet has a different finished dimension due to the effect of outer

sheets wrapping over inner ones (i.e. the number of sheets) yet the final assembled

booklet is flat as if all sheets had been trimmed together to the final size, thus

eliminating the cost and bulk of finishing operations while allowing more operations to

be done in a compact, low-cost machine, as suggested by Allen (*column 1 and column*

4, lines 26 – 42).

Referring to **claim 22**, Rourke discloses the system further comprising at least

one post-processing device (*see Fig. 3, finisher 120*) that at least one of cuts and folds

and binds a recording medium printed by said printer device to form a printed product

(*column 5, lines 8 – 10 and column 6, lines 59 – 63*).

Referring to **claim 23**, Rourke discloses the system further wherein binding

ensues in binding (*column 5, lines 8 – 10 and column 6, lines 59 – 63*).

Referring to **claims 24 and 26**, the rationale provided in rejection of claim 21 is

incorporated herein. The method of claim 21 is stored as a program of instructions of

claims 24 and 25 within memory (*see Rourke [Fig. 2, main memory 56]*) and executed

by a series of processors (*see Rourke [Figs. 2, 5A – 5C, controller 7 comprising system*

controller 54] and see Yamada [Fig. 3, CPU 1]).

Referring to **claim 25**, Rourke discloses the product further comprising: at least

one of a data carrier (*see Figs. 2, 5A – 5C, controller 7 communicates data via memory*

buses 72 and 74) and a datafile and a computer program module and a command

sequence and a signal sequence (*column 6, lines 1 – 5*).

Referring to **claim 16**, the rationale provided in the rejection of claim 21 is

incorporated herein. In addition, the system of claim 21 performs the method of claim

16. Furthermore, Rourke discloses the method further wherein said step of

computationally simulating simulates the folds of the signature for said position

correction, and further comprising the step of:

calculating correction values for the print image of a page from an influence of

each fold on a print image of at least one page (*see Fig. 19 wherein shift increment x*

and extra shift increment x' is applied to all pages 1 – 16 [column 10, lines 13 – 55]),

wherein said simulating step <u>simulating</u> the folds signature-by-signature with

ascending or descending page number, and further comprising the step of:

forming pairs of successive page numbers that due to the signatures at least one

of come to lie on one another as a result of a fold and between which a fold is provided

due to the signature (*column 6, line 64 – column 7, line 7 and column 8, lines 23 – 46*);

however, neither Rourke, Stahl GmbH nor Yamada explicitly disclose the method

further wherein said simulating step <u>simulating</u> the folds <u>for said position correction</u>

page-by-page.

Allen discloses the method wherein said simulating step <u>simulating</u> the folds <u>for</u>

<u>said position correction</u> page-by-page (*column 3, lines 8 – 9 wherein a fold line is*

created in the center of each sheet and column 4, lines 53 – 57 wherein the software

adjusts the location of printed images [i.e. page by page] on each sheet such that the

position will vary sheet-wise based upon the page number in the booklet and such

position correction is simulated via the software).

Referring to **claim 19**, Rourke discloses the method further wherein said

parameter is a thickness of the recording medium (*column 7, lines 26 – 28*).

Furthermore, Allen discloses the method further wherein said parameter is a

thickness of the recording medium (*column 4, lines 38 – 39 and 58 – 64*).

6.   *Claims 17 – 18* are rejected under 35 U.S.C. 103(a) as being unpatentable over

Rourke *et al.* (U.S. Patent No. 5,398,289) in view of **Stahl GmbH "Folding**

Techniques" in view of **Yamada** (U.S. Patent No. 4,672,462) in view of **Allen** *et al.*

(U.S. Patent No. 6,099,225) in view of **Iwasaki** (U.S. Pre-Grant Publication No.

2001/0039554 A1) and further in view of **Ahrens** (U.S. Pre-Grant Publication No.

2002/0018239 A1).

Referring to **claim 17**, Rourke, Stahl GmbH, Yamada and Allen disclose the

method as discussed above but does not explicitly disclose the method further

comprising the steps of carrying out a successive check out to see whether a physical

fold of the sheet is possible as a result whereof the pages of a page pair of successive

pages are arranged in reading sequence after the sheet is folded to form the signature,

and implementing a data-oriented fold when a fold is possible and entering the page

pair in a list when a physical fold cannot be implemented.

Iwasaki discloses carrying out a successive check out to see whether a physical

fold of the sheet is possible as a result whereof the pages of a page pair of successive

pages are arranged in reading sequence after the sheet is folded to form the signature

(*see Figs. 3, 17 – 20 and 22 [paragraphs 0065, 0068]*), and

implementing a data-oriented fold when a fold is possible (*see Figs. 3, 17 – 20*

and 22 wherein a fold is implemented if possible, and 0072 wherein a fold is determined

impossible [paragraphs 0065, 0068]) but does not explicitly disclose entering the page

pair in a list when a physical fold cannot be implemented.

Ahrens discloses a method implementing a data-oriented format of presentation

data when the operation of formatting the presentation data is possible and entering the

data in a list *(see Fig. 2, list 237 and Fig. 4, step 440)* when an operation of the format

of presentation data cannot be implemented *(see Fig. 4, steps 420 – 455)*. The

rasterization of text data overlapping non-transparent graphic objects relates to the

format of presentation data, and the method of successively determining the presence

of text data overlapping any non-transparent graphic objects within a document for

printing as disclosed relates to the control of such format of presentation data.

Furthermore, the data-oriented folding of page pair relates to the format of presentation

data, and the method of successively determining the presence of physical folds of a

page pair within a document for printing relates to the control of such format of

presentation data. Therefore, the operation of the format of presentation is analogous

to both the normal printing of text objects without converting into a bitmap image as

disclosed by Ahrens and to the data-oriented folding of a page pair. Also, the

affirmative successive detection of text data overlapping non-transparent graphic

objects *(see Fig. 4, step 430 wherein a successive check is done for all non-transparent*

graphic objects to determine if text overlaps those graphic objects [paragraph 0027 –

0034]) is analogous to the affirmative successive detection of an impossible physical

fold. An operation of formatting the presentation data, i.e. normal printing of text objects

without converting into a bitmap image, is implemented when possible *(see Fig. 4, steps*

431 and 432 wherein non-overlapping text data is processed for printing as non-bitmap data [paragraphs 0029 – 0030, paragraph 0039, lines 14 – 15 and paragraph 0044, lines 4 – 6]). The data is entered into list 237 when an operation of the format of presentation data, i.e. normal printing of text objects without converting into a bitmap image, cannot be implemented (*see Fig. 4, steps 431, 432 and 440 [paragraphs 0029 – 0030, 0040]*).

Rourke, Stahl GmbH, Yamada, Allen, Iwasaki and Ahrens are combinable because they are both from the same field of endeavor, being detail of image placement wherein the format of the presentation data is controlled. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include successively checking if a physical fold is possible and implementing the physical fold if possible along with a printing system wherein the format of the presentation data is controlled. The suggestion/motivation for doing so would have been to improve the convenience of paginating printed material which automates the assignment of fold lines of printed material, as suggested by Iwasaki (*paragraphs 0004, 0005, 0009 – 0011*), and because Ahrens is from the same field of endeavor, being detail of image placement wherein the format of the presentation data is controlled.

Referring to **claim 18**, Ahrens discloses the method further comprising the step of processing presentation data present in the list (*see Fig. 2, list 237 and Fig. 4, steps 450 and 455*) with priority over other presentation data until a non-processed presentation data in the list is processed (*paragraph 0037, paragraph 0039, lines 14 – 15, paragraphs 0040 and 0043*). The rasterization of text data overlapping non-

transparent graphic objects present in the list relates to the format of presentation data,

and the method of rastering text data overlapping any non-transparent graphic objects

in the list for printing as disclosed relates to the control of such format of presentation

data. Furthermore, the non-foldable page pair present in the list relates to the format of

presentation data, and the method of processing page pairs in the list for printing relates

to the control of such format of presentation data. Therefore, the processing

presentation data present in the list is analogous to both the rasterization of text data

overlapping non-transparent graphic objects present in the list as disclosed by Ahrens

and the processing of the non-foldable page pair present in the list. Also, the rastering

of text data overlapping any non-transparent graphic objects in the list (*see Fig. 4, step*

450 [paragraph 0037]) is analogous to the processing of processing the non-foldable

page pairs in the list. Processing of presentation data present in the list, i.e.

rasterization of text data overlapping non-transparent graphic object in the list 237, is

performed before the final output image is printed as well as before the printing of non-

bitmap data (*see Fig. 4 wherein the rasterization steps 450 and 455 are performed prior*

to step 460 wherein both bitmap and non-bitmap data is printed [paragraphs 0026,

0037, paragraph 0039, lines 14 – 15, paragraph 0043 and paragraph 0044, lines 4 – 6

wherein non-overlapping text data is processed for printing as non-bitmap data]); thus,

processing of presentation data present in the list, i.e. processing of page pairs present

in the list, is performed with priority over other presentation data, i.e. other page pairs.

Regarding "until a non-foldable page pair in the list is processed", only non-foldable

page pairs exist in the list according to claim 17, and Ahrens discloses processing of

presentation data present in the list, i.e. rasterization of text data overlapping non-transparent graphic object in list 237, which is analogous to processing page pairs present in the list which only contains non-foldable page pairs.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamamura (U.S. Pre-Grant Publication No. 2003/0189718) discloses an information processing apparatus to automatically set a binding margin sheet by sheet in the case of performing middle binding booklet printing wherein the binding margin is directly related to the position of the image of the page and the folding line (*see Figs. 5A – 5C and 10A – 10C*).

Toda *et al.* (Japanese Patent No. 63-085559) disclose a magazine editing system (*see Abstract*).

Goel *et al.* (U.S. Patent No. 7,177,045) disclose a system for mixed page imposition wherein alignment, offset and scaling settings are applied to individual slots, rows, columns or all slots (*see Figs. 2, 3 and 10*).

Holt (U.S. Patent No. 5,495,561) disclose an operating system with object-oriented printing interface which includes document grouping or folio objects and objects that are capable of automatically paginating printable information, providing page composition including the addition of margins, n-up printing and page imposition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571) 272-5944. The examiner can normally be reached on M-F 8:30am-5:00pm.
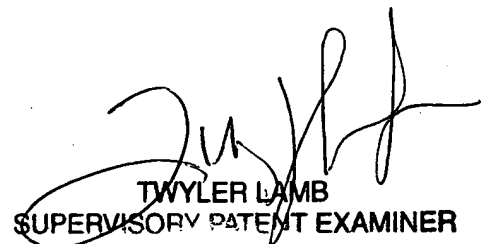
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MDR   2/20/07

TWYLER LAMB
SUPERVISORY PATENT EXAMINER